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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-------------|----------------------|---------------------|-------------------|
| 10/723,537 | 11/26/2003 | Paul Scott | 3063.VIN | 8673 |
| 40256 | 7590 | 12/13/2005 | EXAMINER | |
| FERRELLS, PLLC | | | | YAO, SAMCHUAN CUA |
| P. O. BOX 312 | | | | ART UNIT |
| CLIFTON, VA 20124-1706 | | | | PAPER NUMBER |
| | | | | 1733 |

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/723,537 | SCOTT ET AL. | |
| | Examiner | Art Unit | |
| | Sam Chuan C. Yao | 1733 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 November 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
 - 4a) Of the above claim(s) 7-11 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of in the reply filed on 11-16-05 is acknowledged. The traversal is on the ground(s) that "... *Claim 7 of Group II, it is pointed out that this product cannot, by definition, be made by a process materially different than that of Group I because Claim 7 depends from Claim 1.*".. This is not found persuasive because "[e]ven though product-by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production." MPEP 2113. As noted in a prior office action, the web can be formed by a materially different process such as wet-laying process or impregnating fibers as the fibers are being dry laid onto a forming surface. As for Counsel's argument regarding Groups I and III, as noted in a prior office action, the product can be used in a materially different process such as using the recited polymer binder for bonding abrasive particles.

In light of Counsel's argument regarding Groups II and III, the restriction between these two groups is withdrawn. Since Counsel has elected group I, this is moot.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This claim which is dependent claim 3 is indefinite, because this claim appears to somewhat broadened claim 3 instead of further defining claim 3. Note that claim 4 includes "ethylene" from a recited Markush group. However, the Markush group in claim 3 does not include "ethylene".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6 are under 35 U.S.C. 103(a) as obvious over Tsugaya et al (US 5,706,833) in view of Applicant's Admitted Prior Art (AAPA) and Matsumura et al (US 5,927,287).

At the outset, none of these claims positively require forming a cigarette filter.

Tsugaya et al discloses a process of making a disintegratable tobacco filter. The process comprises providing an aqueous binder dispersion comprising a) water-insoluble polymer such as polyvinyl acetate, polyethylene, ethylene-vinyl acetate copolymer, and b) water-soluble polymer such as polyvinyl alcohol, methylcellulose, ethylcellulose, hydroxyethylcellulose, gum Arabic, etc.; applying the aqueous binder to a tow of cellulose ester fibers, and then processing the binder coated tow into a

filter rod; wherein a weight ratio between the water-soluble polymer and the cellulose ester tow is most preferably be around 1-5/100; and wherein a weight ratio between the non-water-soluble polymer and the cellulose ester tow is most preferably be around 1-6/100 (col. 1 lines 6-20; col. 2 lines 12-68; col. 4 lines 15-67; col. 6 lines 24-40; col. 7 lines 6-45; col. 8 lines 32-38; col. 8 line 66 to col. 9 line 24; col. 10 lines 23-44). While Tsugaya et al does not teach using a finished filter rod for making a cigarette filters, it is quite clear that the filter rod is capable of being used as cigarette filters since the filter rod is used as tobacco filters.

While the above water-soluble polymer is not characterized by Tsugaya et al to function as a "*stabilizing agent*", the water-soluble polymer suggested by Tsugaya et al must naturally have a stabilizing property since the polymer is basically identical to Applicant's stabilizing agents such as the one recited in claims 5-6.

Tsugaya et al differs from claims 1 and 3-6 in that, Tsugaya et al does not teach using an air-laid fiber web. However, such would have been obvious in the art, because: a) it is old in the art to form a filter from a latex bonded air-laid non-woven web as exemplified in the disclosure of AAPA (numbered paragraph 3); and, b) it is old in the art to manufacture disintegratable tobacco filters using a nonwoven web prepared "*by a conventional dry web-formation technique*" (e.g. air-laid) as exemplified in the teachings of Matsumura et al (col. 2 lines 28-36; col. 7 line 22 to col. 8 line 67). Note: Matsumura et al teaches using similar type of water-soluble binder as Tsugaya et al. See column 8 lines 54-64.

With respect to claim 2, it is old in the art to use fluff pulp fibers for making filters as exemplified in the teachings of AAPA (numbered paragraph 3 lines 8-14). More important, it is old in the art to use "*fibrillated*" pulp fibers for making tobacco filters as exemplified in the teachings of Matsumara et al (col. 7 lines 42-67).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richard Crispino can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

Scy
12-08-05